

**REMARKS/ARGUMENTS**

Prior to entry of this amendment, claims 1-27 were pending in the application. An office action mailed April 26, 2004 rejected all pending claims under 35 U.S.C. §§ 101 and 112, ¶ 2. The office action additionally rejected claims 1-5, 7-11 and 13-25 under 25 U.S.C. § 102(e) as anticipated by U.S. Patent No. 6,338,043 ("Miller") and claims 6, 12, 26 and 27 under 35 U.S.C. § 103(a) as unpatentable over Miller. This amendment amends claims 1-7, 9-14, 16-22, and 24-27 and adds new claims 28 and 29. Hence, after entry of this amendment, claims 1-29 will stand pending in the application.

Claim Amendments:

Claims 1, 7, 14, 19, 24, 26 and 27 have been amended. Claims 1 has been amended to recite a "computer system" comprising "a computer," "instructions to identify a plurality of categories of advertisements" and "instructions to implement a plurality of restrictions . . . ." Similarly, claims 7 and 14 have been amended to recite a "computer system." Claim 19 has been amended to recite "imposing with a computer at least one restriction . . . ," and claim 24 has been amended to recite "receiving at a computer an availability request . . ." and "adjusting with the computer said quantity . . . ." Claims 26 and 27 have been amended to recite "generating with a computer a matrix . . ." and "the computer plotting a graph . . . ." Support for these amendments can be found, *inter alia*, at lines 33-34 on page 12 and lines 1-4 on page 13 of the specification.

Claims 1-7, 9-14, 16-22, 24 and 25 have been amended to replace the term "advertisement" with "ad impression," a term referenced throughout the specification. Further, claims 28 and 29 have been added. Support for the added claims can be found at, *inter alia*, lines 29-30 on page 12 of the specification.

Claim Rejections - 35 U.S.C. § 101

Claims 1-27 were rejected under 35 U.S.C. § 101 as being directed to non-statutory subject matter, assertedly because no computer implementation or any other technological basis is employed by the claims. The applicant traverses the rejections in part and

submits that the rejections have been overcome in part. More specifically, the applicant respectfully asserts that one skilled in the art would understand that the “system” claimed in claims 1-18 recites a computer system, placing those claims well within the scope of patentable subject matter. Nonetheless, in the interest of expeditious prosecution, claims 1, 7 and 14 have been amended to recite a “computer system.” Further claim 1, as amended, expressly recites “a computer,” while claims 7 and 14 recite, *inter alia*, “an ad request interface,” and “an inventory management system” each of which would be recognized by one skilled in the art as reciting sufficient technological structure to satisfy § 101. For at least these reasons, claims 1, 7 and 14, and the claims that depend therefrom, comply with § 101, and the applicant respectfully requests the withdrawal of the § 101 rejections of those claims

Claims 19, 24, 26 and 27 have been amended to include a technological basis. Merely by way of example, claim 19, as amended, recites, *inter alia*, “imposing with a computer at least one restriction . . . ,” and claim 24 recites, *inter alia*, “receiving at a computer an availability request . . .” and “adjusting with the computer said quantity . . .” Likewise, claims 26 and 27 each recite, *inter alia*, “generating with a computer a matrix . . .” and “the computer plotting the graph . . .” For at least these reasons, claims 19, 24, 26 and 27 (and their respective dependent claims) are believed to comply with § 101, and the applicant respectfully requests the withdrawal of the § 101 rejections of those claims.

#### Claim Rejections - 35 U.S.C. § 112

Claims 1-27 stand rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which the applicant regards as the invention. First, the office action rejects claims 6, 12, 26 and 27 as indefinite and objects to the term “on a selected date,” as used in those claims. The term, however, is used only as a part of the phrase “based on a selected date,” which describes how a data line from the claimed graph may be identified. The specification (*e.g.*, p. 12, ll. 10-30) clearly shows how a data point for a selected hypothetical date may be estimated from a graph similar to that claimed in claims 6, 12, 26 and 27, and further, how a data line may be identified for that selected date (*see, e.g.*, Fig. 10). Based on this disclosure, one skilled in the art

unquestionably would be able to ascertain what is meant by the term “based on a selected date,” as it is used in claims 6, 12, 26 and 27, and the applicant respectfully requests the withdrawal of these rejections.

The office action also objects to the terms “advertisements.” The claims have been amended to substitute the term “ad impressions” for the term “advertisements,” and the applicant believes that the amendments overcome the rejections based on the latter term.

The office action further objects to the term “advertising” as indefinite. It is respectfully submitted that the office action’s objection misinterprets that term as it is used in the claims. The word “advertising” is used only as part of the composite term “advertising inventory,” and the specification clearly indicates that “advertising inventory” means the inventory of ad impressions that are available on a given medium (such as a web page, etc.), either in general or subject to particular qualifications (such as dates, target audience, etc.). See, for example, page 5, lines 3-20 of the specification, which describes how an inventory management system may answer queries about an advertising inventory. Based on the written description, one skilled in art would understand what is meant by the term “advertising inventory,” as it is used in the claims. This term, therefore, complies with the requirements of § 112, ¶ 2 and the applicant respectfully requests the withdrawal of all rejections based on this term.

Finally, the office action rejects claims 26 and 27 under § 112, ¶ 2 because the term “demand curve” assertedly is indefinite. The applicant traverses these rejections and respectfully submits that the rejections misperceive the language of claims 26 and 27. The office action asserts that “‘demand curve’ . . . is used by the claim to mean ‘a plot of day of delivery versus days before delivery.’” This is a mistaken reading of claims 26 and 27. While the claims do recite “a graph having a y-axis and a x-axis, said y-axis representing day of delivery and said x-axis representing days before delivery,” this graph is not claimed as a “demand curve.” Indeed, as the specification indicates, such a graph may be used as part of an intermediary calculation to determine desired points for the future, which can facilitate the plotting of a

demand curve. *See* p. 12, ll. 4-30. Hence, while claims 26 and 27 recite “a method for calculating a demand curve,” those claims do not (and need not) claim the demand curve itself. This point is emphasized by new claims 28 and 29, which expressly claim “plotting a demand curve based on the requested data point.” Consequently, the claims’ usage of the term “demand curve” is entirely consistent with the specification.

The office action also asserts that the term “demand curve,” as it is used in the specification, does not comport with an accepted definition for that term. Although the applicant does not concede that the specification’s usage of “demand curve” is inconsistent with an accepted definition, to the extent there is any inconsistency, the specification clearly defines what is meant by that term (and in fact provides an illustrative plot of demand curves on Fig. 6). As the office action implicitly concedes, a patent applicant is entitled to act as his own lexicographer. *See* MPEP § 2106 (“An applicant is entitled to be his or her own lexicographer, and in many instances will provide an explicit definition for certain terms used in the claims. Where an explicit definition is provided by the applicant for a term, that definition will control interpretation of the term as it is used in the claim.”).

In this case, the written description defines “demand curve” thus: “Fig. 6 shows the demand curves for various categories of ad impressions. In Fig. 6, the y-axis represents the number of ad impressions and the x-axis represents the timeline expressed as dates. Each curve represents the demand for a specific category of ad impressions.” (p. 8, ll. 18-21) Hence, the written description clearly defines what is meant in the application by the term “demand curve.” Moreover, as explained above, the use of this term in claims 26 and 27 is entirely consistent with the usage of the term in the written description. The § 112, ¶ 2 rejections, therefore, are believed to be improper, and the applicant respectfully requests that the rejections be withdrawn.

#### Claim Rejections - 35 U.S.C. §§ 102 and 103

Claims 1-5, 7-11 and 13-25 were rejected under 35 U.S.C. § 102(e) as being anticipated by Miller, and claims 6, 12, 26 and 27 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Miller. The applicant respectfully traverses these rejections, because Miller fails to teach or suggest each limitation of any pending claim. In fact, the disclosure of

Miller (c. 1, ll. 6-11) is directed to “media buying systems . . .” (emphasis added), in which it would be nonsensical to attempt to control an advertising inventory (which would be maintained by a seller of ad impressions). Thus, it is not surprising that, while claim 1 (for example) recites, *inter alia*, “a plurality of restrictions designed to limit said allocations levels of said advertising inventory,” which are “applied to one or more of said categories of ad impressions so as to limit the availability of said one or more of said categories of ad impressions,” Miller discloses nothing of the sort. Miller neither teaches nor suggests anything about limiting the availability of advertising inventory.

Indeed, because Miller’s system is designed to help a buyer choose the most cost-effective package of television ad spots to purchase (*see, e.g.*, c. 8, l. 18), it would defeat the purpose of Miller to limit the availability of an advertising inventory. The economic law of supply and demand mandates that, the lower the supply (*i.e.*, the more limited the inventory available to buyers), the higher the price paid by a buyer. Hence, to the extent that Miller’s system did act to limit the availability of an advertising inventory, the system would not promote the most cost-effective package of television spots.

Moreover, because Miller’s system is designed to help a buyer choose from among the inventories of several advertising providers, it could not function to limit the availability of a provider’s inventory, since Miller never discloses or suggests that its system has any control over a supplier’s advertising inventory. Rather, the system of Miller merely helps the buyer choose from among one or more suppliers’ existing inventories. *See, e.g.*, c. 1, ll. 6-10 (“The invention relates generally to media buying systems, and, more particularly, to an apparatus for developing a package of advertising spots from a plurality of available advertising spots . . .”). It is respectfully submitted that “developing a package [from a buyer’s perspective] . . . from a plurality of available advertising spots” is not equivalent to limiting the availability of those spots. Indeed, as noted above, limiting the availability of an ad inventory would be antithetical to Miller’s invention, since it would increase the price (and therefore reduce the relative value to the buyer) of any selected package, which necessarily would not be selected from among a supplier’s full advertising inventory.

To support its rejections, the office action claims that Miller's "guideline variables" function to limit the availability of one or more categories of ad impressions. The passage cited by the office action, however, does not support this reading. That passage (c. 3, ll. 2-15) describes how Miller's system may be used to "develop a package of available spots from the first and second sets of available spots based on the guideline variables." Miller's guideline variables, however, "[p]referably . . . are user definable." (c. 6, ll. 59-60). Since Miller's user is (as noted above), a buyer—not a supplier—of advertising spots, and the user can define the variables as desired, the guideline variables do not limit the availability of an ad inventory: they merely facilitate the selection (by the buyer) of the most cost-effective spots, according to the buyer's own criteria. In other words, Miller's system simply facilitates the buyer's process for selecting advertising spots; it has nothing to do with limiting any inventory.

For at least these reasons, Miller fails to teach or suggest the limitations of claim 1 and therefore fails to anticipate that claim. Further, for the same reasons, it would not be obvious (or, quite likely, even possible) to modify Miller's system to function so as to read on the limitations of claim 1. The office action identifies nothing that could be construed as a suggestion or motivation to modify Miller in this manner, and any such modification would, as noted above, render Miller unsuitable for its intended purpose. Consequently, Miller cannot be used (either alone or in combination with another reference) as the basis for a *prima facie* case of obviousness under § 103(a) with respect to claim 1. MPEP § 2143.02.

Independent claims 7, 14, 19 and 24 likewise are allowable over Miller. Merely by way of example, claim 7 recites, *inter alia*, that "said availability information is obtained based on selectively restricting the quantity of said desired category of advertisements which are available for sale." As explained in detail above, Miller is directed to a system for purchasing ad spots. Even assuming, *arguendo*, that Miller's "guideline variables" did function to "restrict" ad spots that could be purchased by the buyer (a proposition wholly unsupported by Miller's disclosure—the guideline variables simply assist in the selection of a package; nothing in Miller indicates that a buyer cannot override the selections based on the guideline variables), those variables do not—and, indeed, cannot—have anything do with a "quantity of said desired category

of ad impressions which are available for sale.” Since Miller’s system is a buyer-side system, even if a particular buyer using Miller’s system were, for some reason, unable to purchase a particular ad spot, any other buyer still would be free to do so, and there would be no limitation on the quantity of ad spots available for “sale” by the supplier. Miller, therefore, fails to teach or suggest the limitations of claim 7, and that claim is allowable. Claims 14 and 19, which include similar limitations, are allowable for similar reasons. For at least the reasons discussed above, claim 24, which is directed to “a method for managing advertising inventory to enhance ad revenue” likewise is allowable over Miller’s system, which seeks to minimize costs for a buyer of advertising spots (and, correspondingly, minimize ad revenue for a provider of advertising spots).

The applicant respectfully submits that the office action’s rejections of claims 6, 12, 26 and 27 under § 103(a) are equally unfounded. The office action does not even attempt to examine the limitations of those claims but merely states that, “[b]ecause the claimed procedure is much simpler than [Miller’s method of selecting a cost-effective package of advertising spots for a buyer], it would have been obvious to one of ordinary skill in the art, at the time of the invention, to add the claimed method to the teachings of Miller.” The rejections are improper on at least two bases. First, as described above, the system of Miller is intended for a different purpose—to select the most cost-effective (for the buyer) advertising package available—from that of the rejected claims.

Consequently, since Miller is directed to a system for assisting a buyer of advertising spots, there would appear to be no need within the scope of Miller’s disclosure for the calculation of a demand curve, as the term is used in claims 26 and 27. As recited in claim 12, one use of a demand curve is to calculate “the demand for [a] desired category of ad impressions,” which correspondingly can be used by an advertising supplier to determine offer prices for ad impressions. It is unclear why a buyer of advertising spots would have a need to calculate the demand for those spots. Instead, Miller’s disclosure presupposes the buyer’s demand for advertising spots and instead is directed to a system for identifying the most efficient

way to purchase a package of advertising spots. Hence, the claimed method could not be used to accomplish the purpose for which Miller's system is intended.

Moreover, the rejections rely entirely on impermissible hindsight. *See* MPEP § 2141.01. The office action's recitation of the phrase "at the time of the invention" does not insulate the rejection from hindsight. The office action points to no evidence that the calculations recited by claims 26 and 27 were known in the art at the time of invention, and the mere fact that the recited calculations are "simpler" than those disclosed by Miller does not render them obvious without the identification of some motivation or suggestion in the art to modify Miller in the asserted manner, an identification the office action fails to provide.

For at least these additional reasons, there is no suggestion or motivation to modify Miller to read on the rejected claims, and the office action has failed to prove a *prima facie* case of obviousness under § 103(a). Consequently, the rejections of claims 26 and 27 should be withdrawn.

Dependent claims 2-6, 8-13, 15-18, 20-23, 25, 28 and 29 are allowable as depending from allowable base claims and as being directed to specific novel substitutes. Consequently, the applicant believes that all pending claims are allowable over Miller, taken either alone or in combination with some other reference, and respectfully requests that the rejections of claims 1-27 under §§102 and 103(a) be withdrawn. Likewise, the applicant submits that new claims 28 and 29 are allowable, for at least the reasons set forth above.

### Conclusion

In view of the foregoing, the applicant believes all claims now pending in this application are in condition for allowance. The issuance of a formal Notice of Allowance at an early date is respectfully requested.

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Reply to Office Action of April 26, 2004

PATENT

If the Examiner believes a telephone conference would expedite prosecution of this application, please telephone the undersigned at 303-571-4000.

Respectfully submitted,

  
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